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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,158	02/14/2001	Michael Dewayne Finke	1391-22400	2071

30652 7590 05/21/2004

CONLEY ROSE, P.C.  
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PLANO, TX 75024

EXAMINER

EDWARDS JR, TIMOTHY

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/783,158	FINKE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Timothy Edwards, Jr.	2635	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) 1,9 and 41 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8,10-40,42-73,80 and 83-92 is/are allowed.
- 6) ☒ Claim(s) 74-79,81 and 82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see REMARKS, filed March 1, 2004, with respect to Claims 2-8,10-40,42-73,85-92 have been fully considered and are persuasive. The rejection of office action dated November 26, 2003 has been withdrawn.

Applicant's arguments with respect to claims 74-82 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

Claims 2-8,10-40,42-73,85-92 is allowed.

Claims 80,83,84 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 74-76,79 are rejected under 35 U.S.C. 102(b) as being anticipated by Millheim [US 4,794,534].

Considering claim 74, Millheim discloses a method for transmitting a computer command to generate downlink instruction signals to control directional drilling operation at a drilling site wherein the computer command is transmitted from a location remote from the drilling site (see col 7, lines 27-36, col 9, lines 47-50 and col 10, line 27 to col 11, line 12.

Considering claim 75, Millheim discloses the limitation of this claim in col 9, lines 47-50.

Considering claim 76, Millheim discloses the limitations of this claim in col 5, lines 55-64 and col 9, lines 47-56.

Considering claim 79, Millheim discloses the limitation of this claim in col 4, line 36 to col 5, line 2.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 77,78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millheim and further in view of Krueger et al [US 6,516,898].

Considering claim 77, Millheim discloses a surface controller programmed with a predetermined trajectory for a well bore and is automatically drilled by a drilling assembly (see col 4, lines 13-42); except the drilling assembly programmed with drilling trajectory. However, Krueger teaches the programming of the drilling trajectory into the down hole drilling assembly (see col 2, lines 49-56). Even though, Millheim does not recite the programming of the drill assembly one of ordinary skill in the art would readily recognize the desire to program both systems (surface and subsurface) such that either system is able to detect any deviation from the planned trajectory. Therefore, it would have been obvious to one of ordinary skill in the art to program the drilling assembly of the Millheim as taught by Krueger because both systems are concern with the automatic drilling of a well and this would allow both system to detect any deviation from the planned trajectory.

Considering claim 78, Krueger teaches this limitation in col 13, lines 35-56. obviousness rejection is as stated in claim 77.

Claims 81,82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherbatskoy [US 5,113,379], and further in view of Krueger et al [US 6,516,898],

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Considering claim 81, Scherbatskoy disclose a method for sending a downlink instruction signal without interrupting fluid circulation (see col 9, lines 38-40 and col 59, lines 52-61), to effect the operating change to any of a plurality of down hole tools (see col 24, lines 45-50) Scherbatskoy teaches steering the drill for a deviated hole.

Scherbatskoy is concern with drilling a well and transmitting signal without interrupting the flow of fluid in the well. Thus it would be within the scope of the Scherbatskoy system to effect the operating change of the cutting tool when a steering change is made in the drill system. Scherbatskoy does not specifically recited the operating change is to take a sample using a drill formation tester. However, Krueger teaches during drilling to take a sample using a drill formation tester (see col 7, lines 39 to col 8, line 11). Krueger teaches the drilling assembly may contain any number of sensors and devices, which aid the drilling operation. Scherbatskoy disclose in col 16, lines 6-11, see fig 3 a special telemetry processing unit near the drill bit (31) (which is the general location of the down hole assembly). Scherbatskoy also discloses the use of several sensors in his special telemetry unit. Therefore, it would have been obvious to one of ordinary skill in the art to modify the sensors of the Scherbatskoy system to include a drilling formation tester because both references are concern with drill a well and sensing at the drill bit.

Considering claim 82, Krueger teaches this limitation in col 7, lines 16-60 and col 8, lines 31-38. obviousness rejection is as stated in claim 81.

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1. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (703) 305-4896. The examiner can normally be reached on Monday-Thursday, 8:30 a.m.-4:00 p.m. The examiner cannot be reached on Fridays.

If attempt to reach the examinee by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (703) 305-4704.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be mailed to:

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Washington, D.C. 20231

or fax to:

(703), 872-9314 (for formal communications intended for entry)

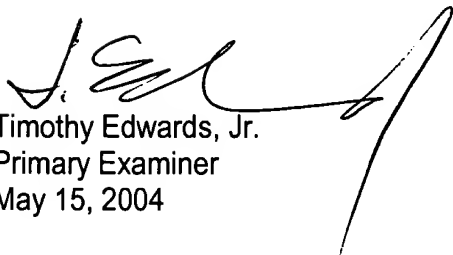
Or:

(for informal or draft communications, please label "PROPOSED"

or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA, Sixth Floor (Receptionist).

  
Timothy Edwards, Jr.  
Primary Examiner  
May 15, 2004